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**VII. 510(k) Summary**

In accordance with the Safe Medical Devices Act (SMDA) of 1990 and Title of the Code of Federal Regulations Part 807 (21 CFR §807), and in particular §807.92, the following summary of safety and effectiveness information is provided:

**A. Submitted by**

Laetitia Cousin  
Director of Regulatory Affairs and Quality Assurance  
NuVasive, Incorporated  
4545 Towne Centre Court  
San Diego, CA 92121  
Telephone: (858) 909-1868  
Date Prepared: June 22, 2005.

**B. Device Name**

Trade or Proprietary Name: *NuVasive NeuroVision JJB System*  
Common or Usual Name: Electromyography (EMG) monitor/stimulator  
Classification Name: Surgical nerve stimulator/locator  
Evoked response electrical stimulator

**C. Predicate Devices**

The subject device is substantially equivalent to similar previously cleared devices.

**D. Device Description**

The *NVJJB System* utilizes conventional neurophysiologic monitoring to reduce the incidence of injury to nerve roots during instrumented spine surgery. In the procedure, stimulus evoked electromyography is used to determine changes in nerves. Corresponding muscle groups are monitored using surface electrodes, while stimulation is used to detect nerve responses.

The NeuroVision JJB System consists of a reusable Patient Module, a Control Unit comprised of an embedded computer with touch screen controls and an interface card, and an assortment of disposable and reusable conductive probes, electrodes, and electrode leads.

**E. Intended Use**

The NeuroVision JJB System is used for intraoperative monitoring and neurological status assessment by the administration of brief electrical stimulus pulses to neural tissues and the EMG monitoring of the associated muscle groups. The System is used in conjunction with other NuVasive devices to assist in gaining controlled access to, and visualization of, the spine.

***F. Substantial Equivalence***

As was established in this submission, the subject device is substantially equivalent to other devices cleared by the agency for commercial distribution in the United States.

Engineering specifications and labeling have demonstrated that the subject device is substantially equivalent, if not identical, to its predicate devices in terms of design, materials of composition, indications for use, and such other characteristics as may be associated with the manufacture of any medical device.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

SEP 15 2005

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Ms. Laetitia Cousin  
Director of Regulatory Affairs and Quality Assurance  
NuVasive, Incorporated  
4545 Towne Centre Court  
San Diego, California 92121

Re: K051718  
Trade/Device Name: NuVasive NeuroVision JJB System  
Regulation Number: 21 CFR 874.1820  
Regulation Name: Surgical nerve stimulator/locator  
Regulatory Class: II  
Product Code: ETN, GWF  
Dated: June 24, 2005  
Received: June 27, 2005

Dear Ms. Cousin:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

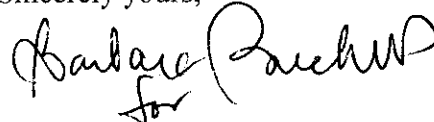
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read "Mark N. Melkerson", with a stylized flourish at the end.

Mark N. Melkerson  
Acting Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

**A. Indications for Use**

510(k) Number (if known): \_\_\_\_\_

Device Name: NuVasive NeuroVision JJB System**Indications for Use:**

The NeuroVision JJB System is used for intraoperative monitoring and neurological status assessment by the administration of brief electrical stimulus pulses to neural tissues and the EMG monitoring of the associated muscle groups. The System is used in conjunction with other NuVasive devices to assist in gaining controlled access to, and visualization of, the spine.

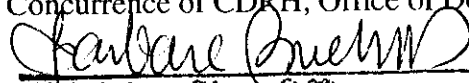
Prescription Use ☒  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)**Division of General, Restorative,  
and Neurological Devices**510(k) Number K051718